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## FUNCTIONALIZED TGF-β FUSION PROTEINS

## **ABSTRACT**

This disclosure relates to TGF- $\beta$  family protein fusions that display substantial native TGF- $\beta$  family protein function while also having an additional functionality conveyed by the addition of a functionalizing peptide domain. Such functionalizing peptide domain can be a tag peptide (*e.g.*, an epitope tag, a purification tag, a molecular size differentiation tag, etc.) or a passenger or targeting protein. Also provided are methods of making these fusions, as well as methods of using them for diagnosis and diagnosis of various conditions, in measuring and monitoring levels of the fusion molecule in experimental systems and subjects, and in measuring and detecting receptor proteins.